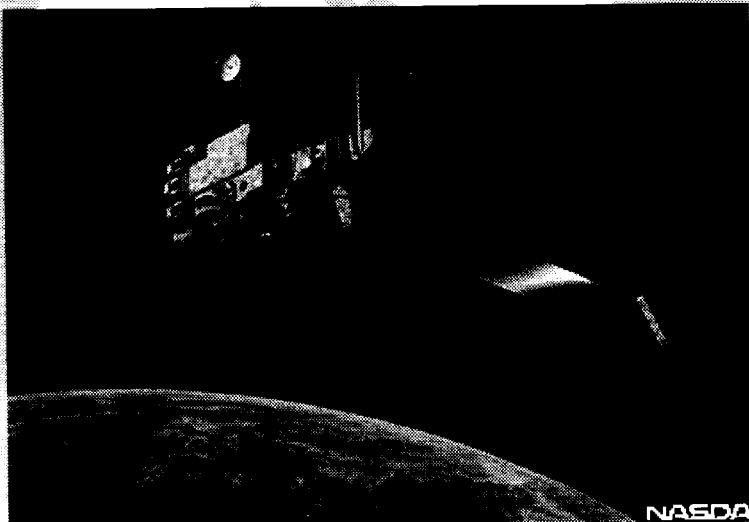


Preliminary results of ADEOS initial mission checkout



Haruhisa Shimoda
ADEOS Program Scientist



ADEOS
Level 1B2

AVNIR Mu Sep 2/1996 D +1330:+330
UTM CC 16m
Band: 1 2 3



C N32°42'/E133°03'
ID: 19960902-021137

POINT: -0.18°
OP: GD

INCID: 0.6°L
GAIN: NNN

SUN EL62° AZ150°
HEOC

COMP: F
ALT: 797km

0 32 64 96 128 160 192 224 256

0 32 64 96 128 160 192 224 256

0 32 64 96 128 160 192 224 256

0 5 10 15 km

NASDA RETAINS OWNERSHIP of DATA

processed on Sep 2/1996

exposed on Sep 2/1996

GLI CAL/VAL Network Modules

Aerosol ground/shipborne modules

Polar nephelometer

Lidar

Shortwave/longwave radiometer system

Optical buoy

Ocean color shipborne module

In situ spectrometer system

GPS camera system

In situ vegetation monitoring system

Cryospheric microphysics system

Laser sizing system

GLI PI Team

		MODIS
Atmosphere:	12	(1)
SRB	:	2
Ocean	:	7
Land	:	11
Cryosphere:	5	

Japanese Scenario of Long Term Earth Observation(Draft)

NASDA/EOPD Sept.7, 1995

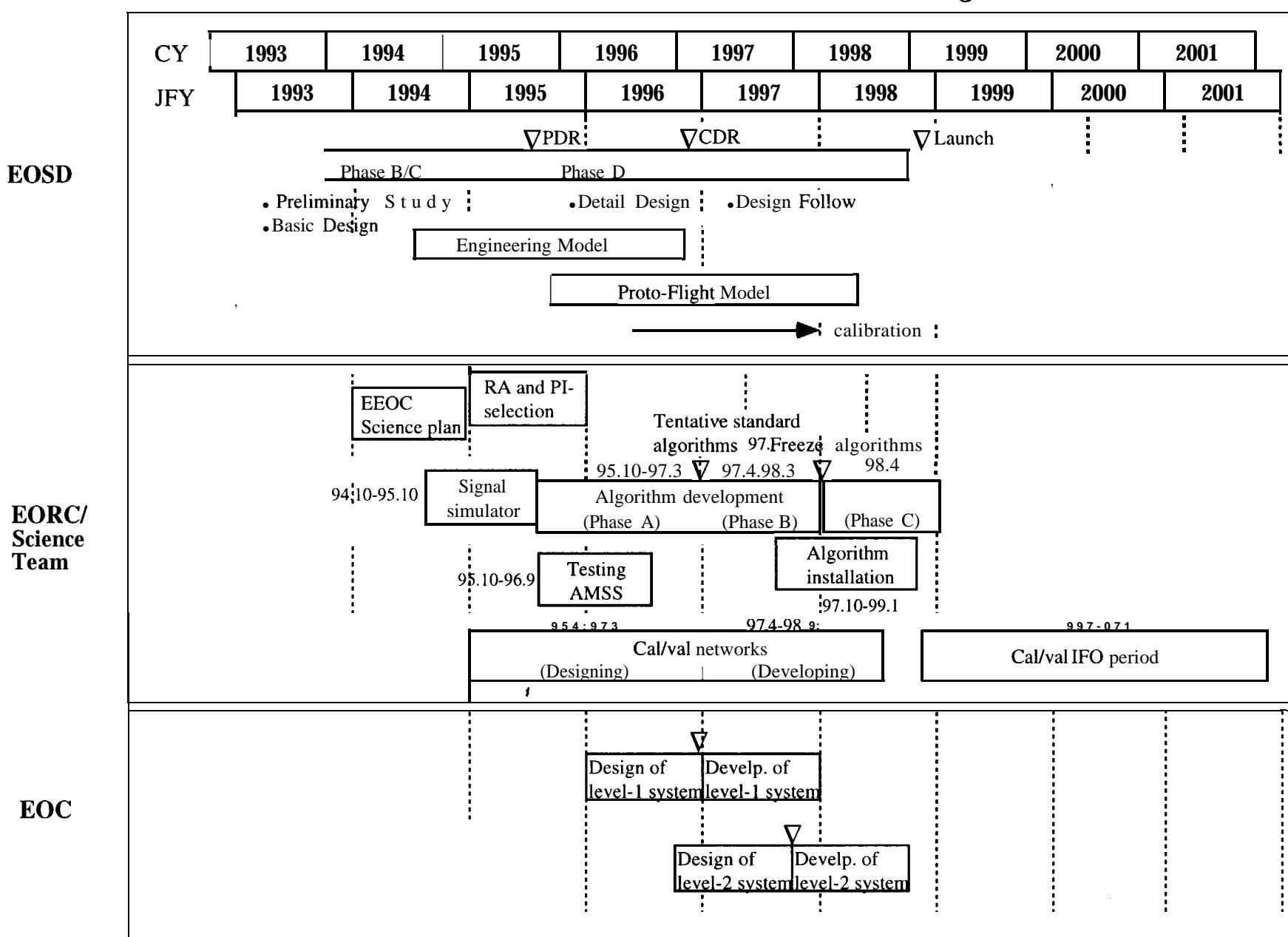
CY Observation	1995	2000	2005	2010
Global Observation (sun synchronous/ medium altitude) Large bus	96Summer ADEOS 99 ADEOS-II 03 ADEOS-III 08 ADEOS-IV	OCTS IMG RIS AMSR II-AS-2 Sea-Winds AVNIR ILAS TOMS GLI POLDER	AMSR-2 ILAS-3 ScaRaB TERSE GLI-2 Sea-Winds-II? A-POLDER IMG-2 (DIAL) (ODUS-2)	AMSR-3 GLI-3 (JLAWS) (CPR)
Regional Land Observation sun synchronous/ medium altitude) Large bus		02 Winter ALOS 04 ALOS-A1 AVNIR-2 V-SAR AVNIR-3 V-SAR	ALOS-A2 AVNIR-4 V-SAR	A/B makes interferome
Diurnal cycle Observation low-high inclination/low medium altitude) Medium- Large bus	97 TRMM Rainfall Observation Mission PR TMI VIRS CERES LIS	03 ATMOS-A1 ATMOS-A2 ATMOS-A3 PR-2 VIRS-2 CERES	ATMOS-B1 ATMOS-B2 ATMOS-C1 ATMOS-C2 CPR ERBE CERES Microwave (APS) L-ALT-I IMG-2 Radiometer LIDAR	Microwave Radiome Soil moisture AT
Geostationary Observation Large bus	Land/Ocean/Atmosphere observation	Cloud/Radiation Mission Atmospheric Mission	06 ATMOS-C1 ATMOS-C2 MILES or AMAS HIRDLS JLAWS SSIM ODIIS-2 II AS. 3	Solar radiance change/Wind/Temperature Monitor GEOS-I 10 GEO GOM Microwave Sounder GEOMER (A)SEM
1 Experimental observation Small bus	Mission resources 150kg 1 sow	99 99 : 01 LIDAR II-AS-II MILES ELMOS:Electro magnetic environment monitor	cont. to ETS series (ETS-NGLASS:Laser Longpass absorption)	
JEM, Space shuttle (low inclination/low altitude)	JEM(Space Station)	CPR LIDAR DIAL	A A MILES JLAWS	Water vapor s Vertical tempe
Airborne Experiment	▲ A A A A PR AMSR LIDAR/LALT (CPR) OLI GLI L-SAR TERSE (NASA Airplane or sensors if available)	DIAL		

Japanese sensor to foreign
satellites.
: ODUS-->EOS/CHEM(2002)
TERSE-->EXPLORER

Foreign sensors to Japanese satellites
: AMAS(D) -->ATMOS-C1
APS(Au) -->ATMOS-B1
CPR(US, GB) -->ATMOS-B1
DPR(F) -->ATMOS-A2

: ScaRaB -->ADEOS-III
ERBE -->ADEOS-III
IASI -->ADEOS-III

Schedule for the GLI Project



ADEOS Web sites

URL :

<http://www.nasda.go.jp>

: Launch information and press inform (NASDA main web site)

<http://www.eoc.nasda.go.jp>

: ADEOS satellite, ground segment inform. and sample (first) images

<http://www.eorc.nasda.go.jp>

: ADEOS research inform.



Home Page on WWW

EORC

<http://www.eorc.nasda.go.jp>

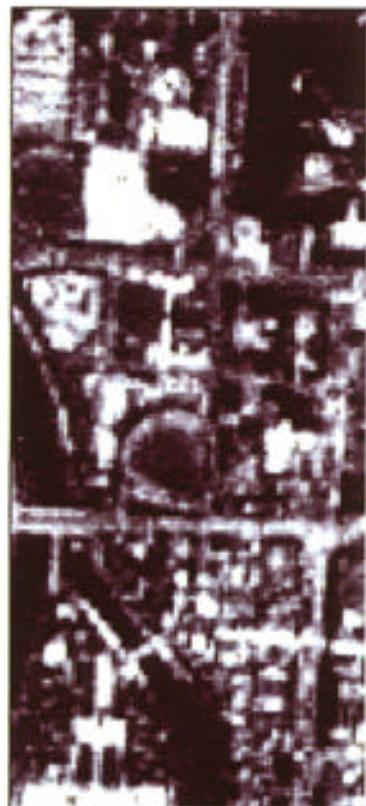
ADEOS

<http://mentor.eorc.nasda.go.jp/ADEOS/index.html>

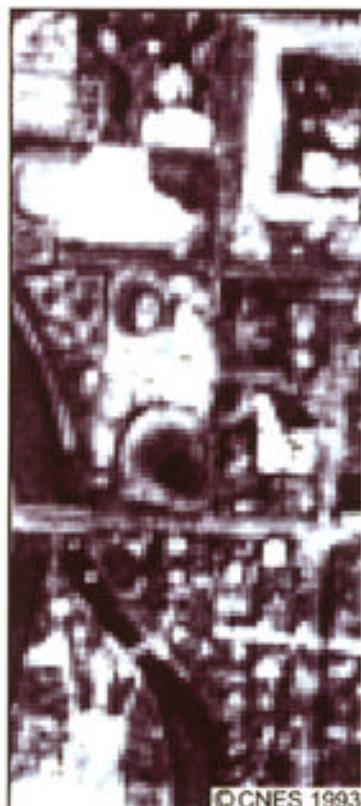


NASDA
NATIONAL SPACE DEVELOPMENT AGENCY OF JAPAN

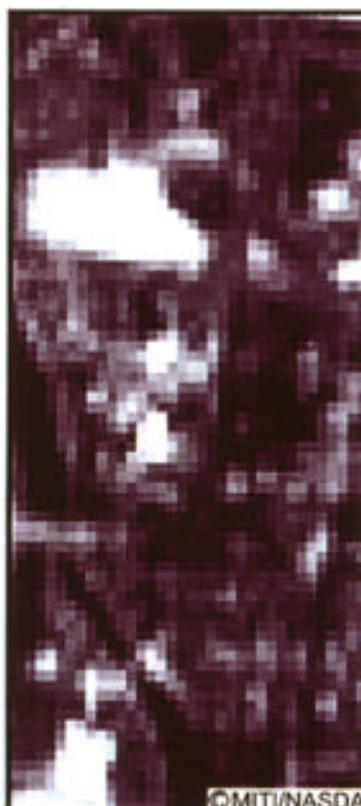
500m



ADEOS/AVNIR/Panchromatic
観測日 1996年09月05日
ポインティング角 18.76度



SPOT-2/HRV/Panchromatic
観測日 1993年04月20日
ポインティング角 16.36度



JERS-1/OPS
観測日 1992年12月19日

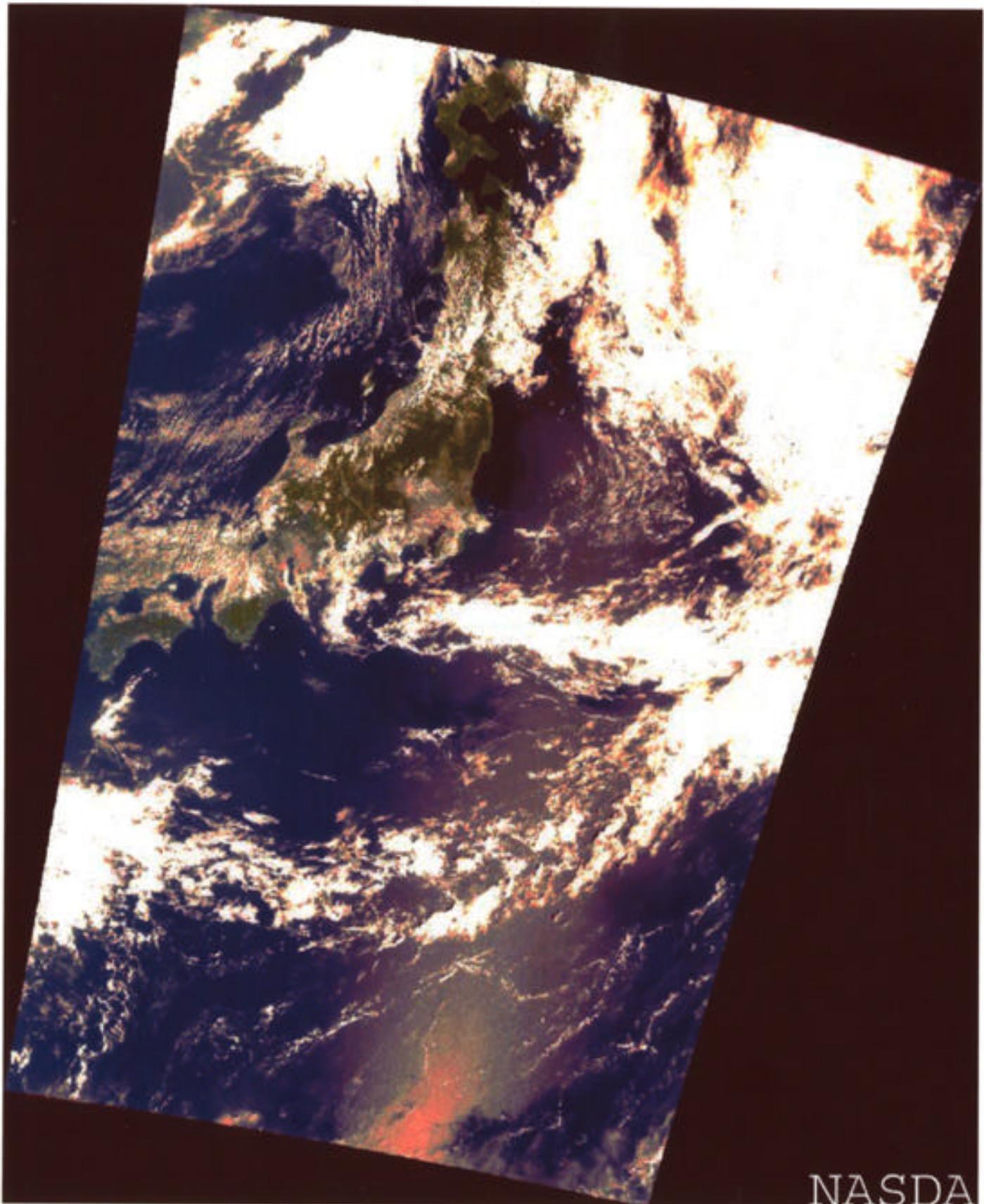
画像- 2

地球観測衛星に搭載されている光学センサの画像比較

観測地域：広島市街中心部

Ocean Color and Temperature Scanner (OCTS)
Visible and Near-infrared Region (VNIR)

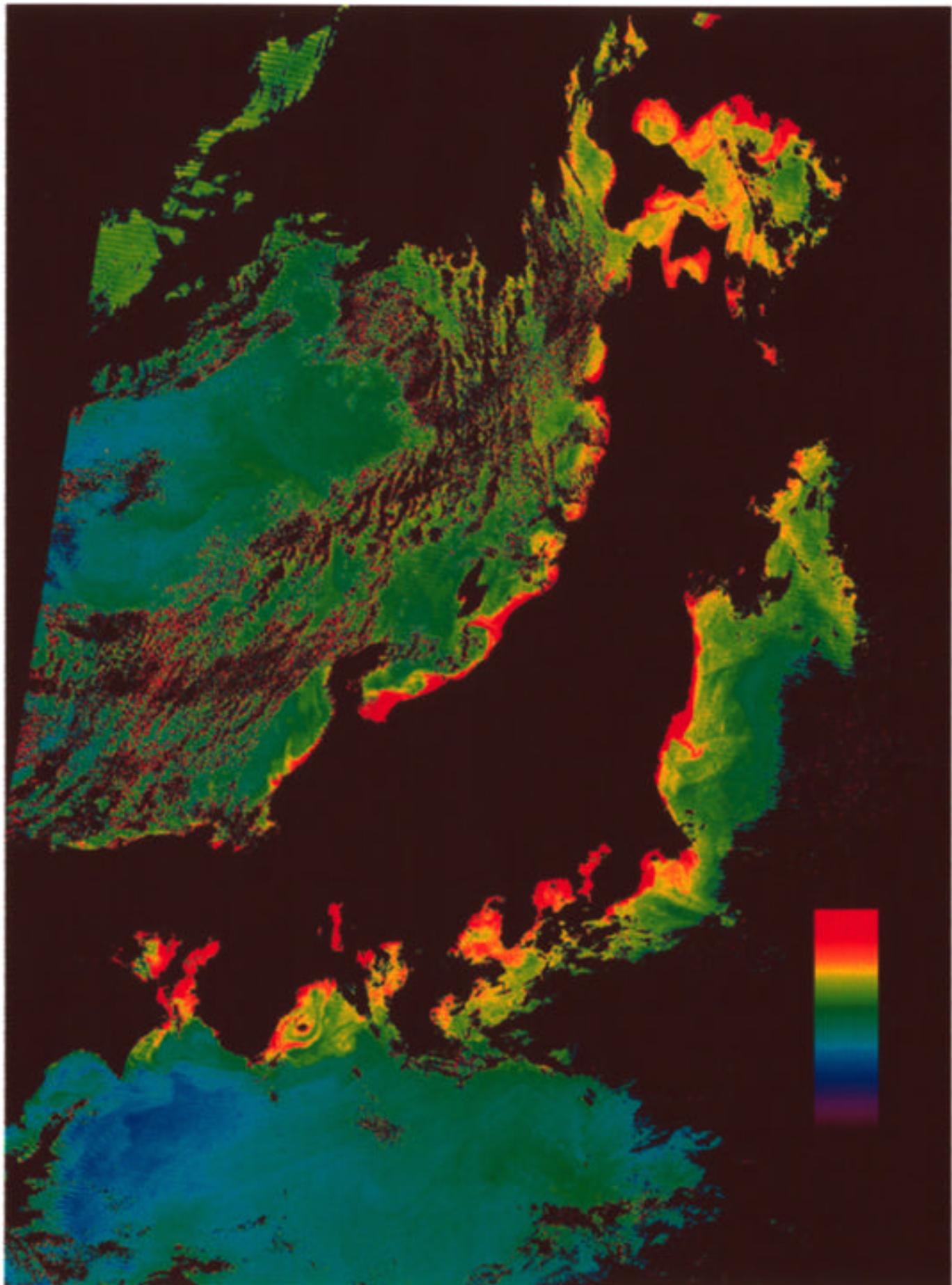
September 3, 1996

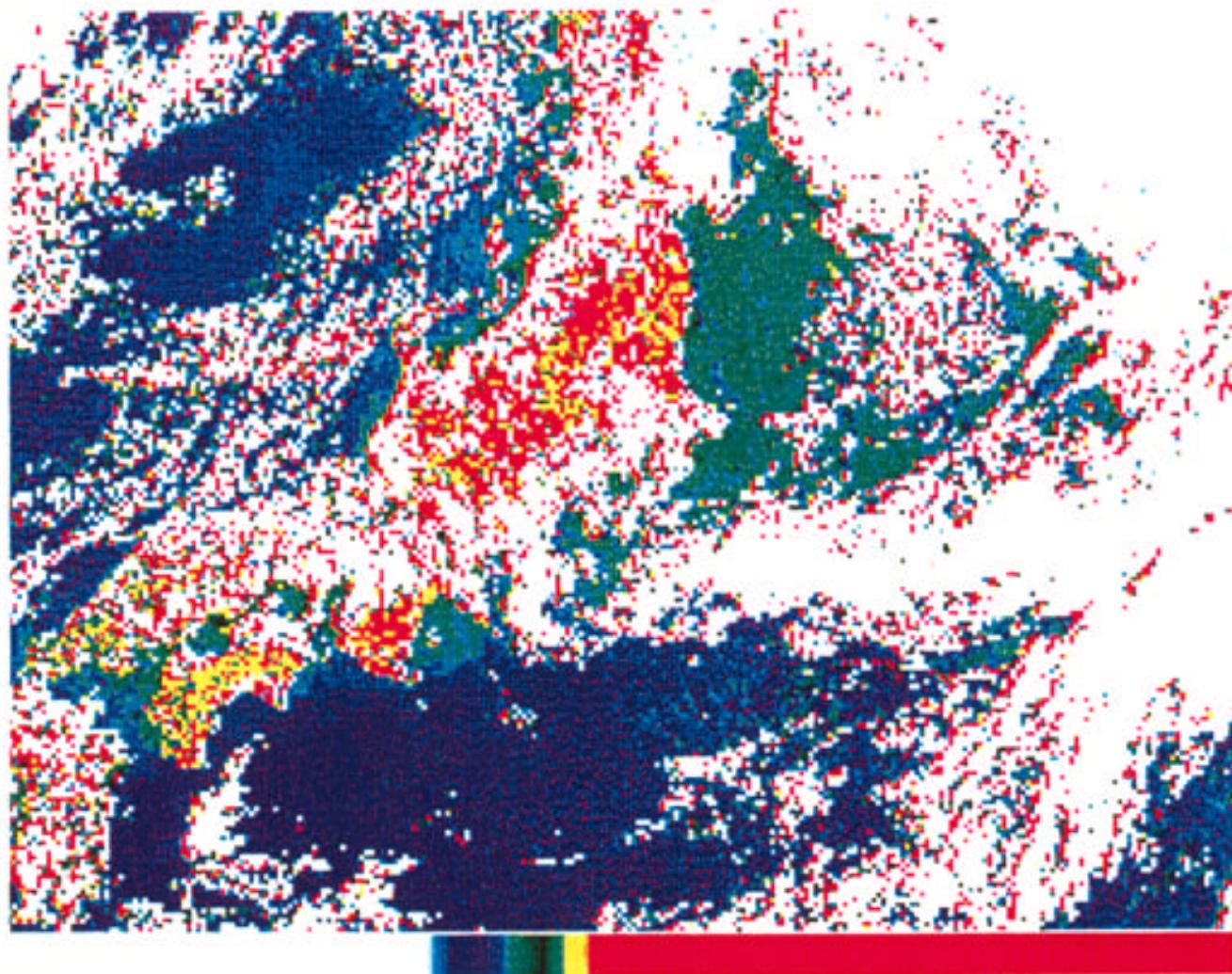


NASDA

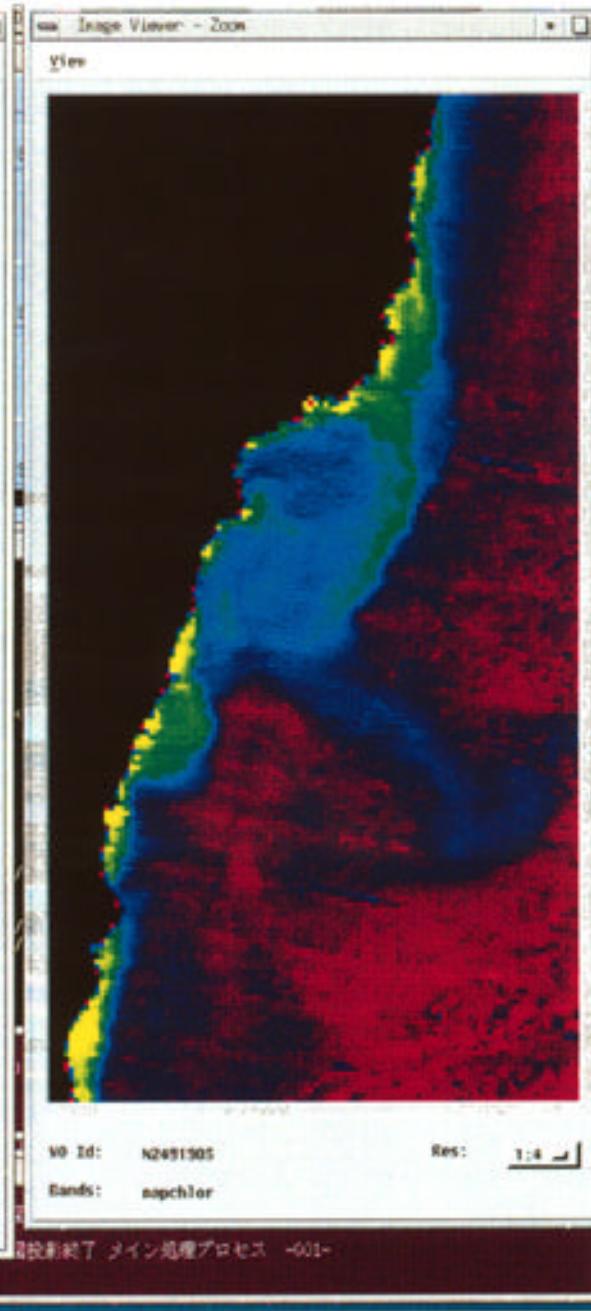
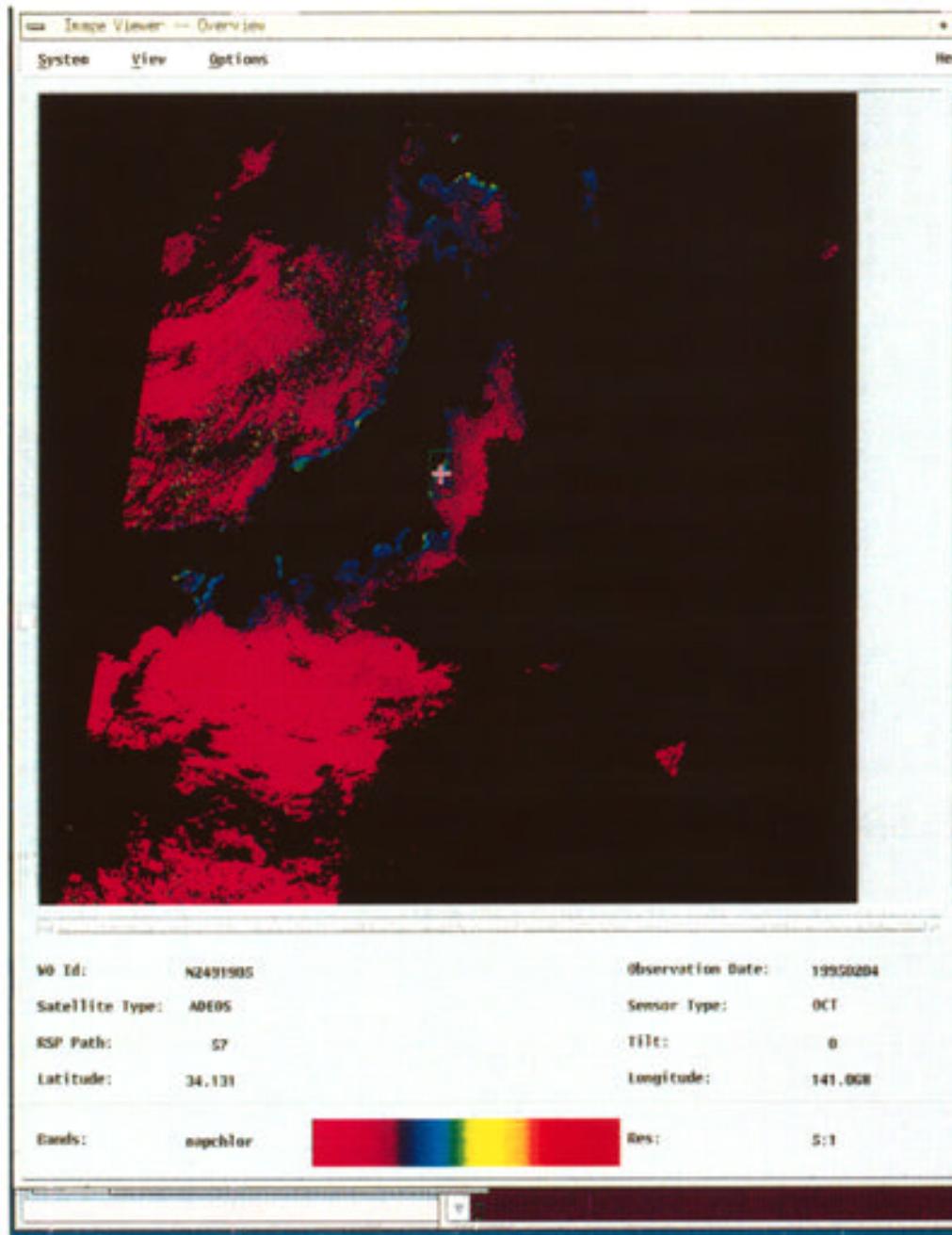
ADEOS / OCTS Chlorophyll - a

September 3, 1996

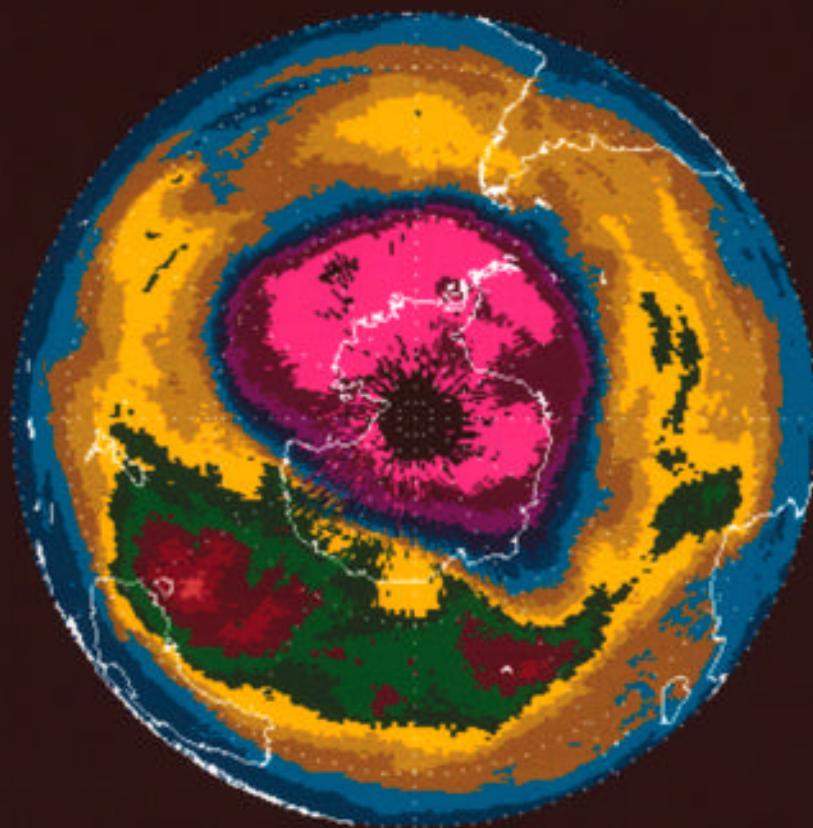




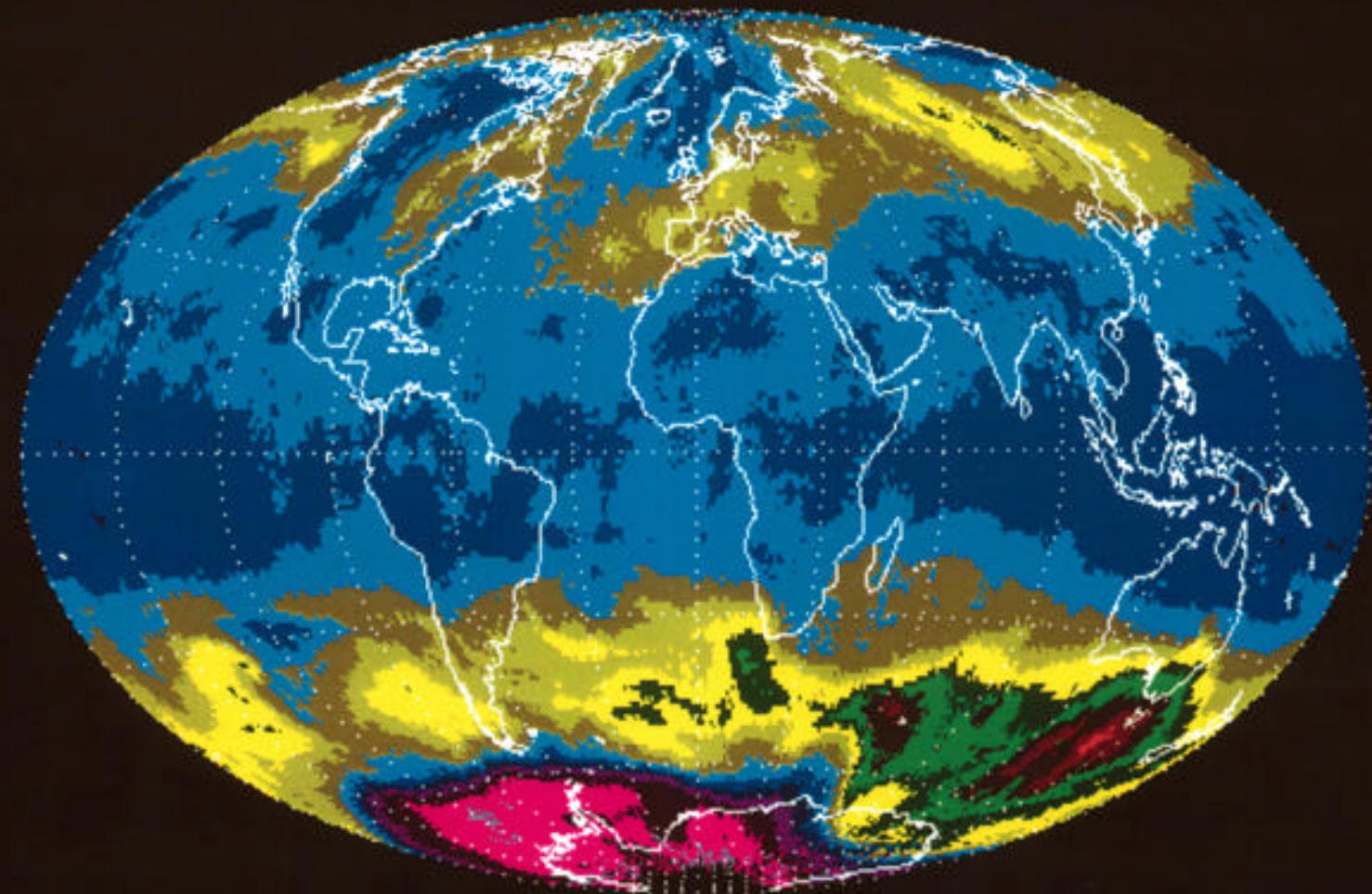
画像4 OCTS粗画像



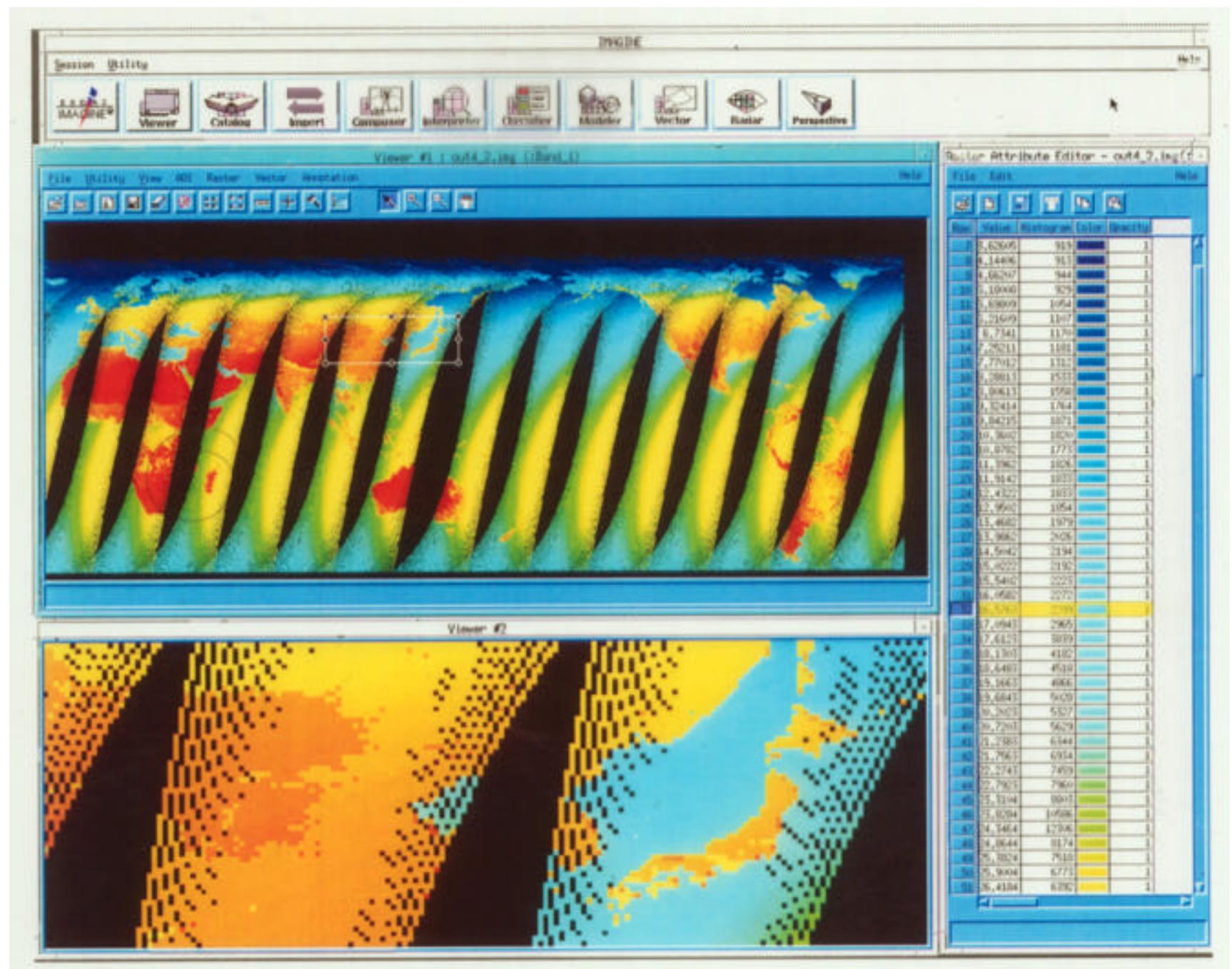
ADEOS TOMS Total Ozone for September 12, 1996



ADEOS TOMS Total Ozone for September 12, 1996

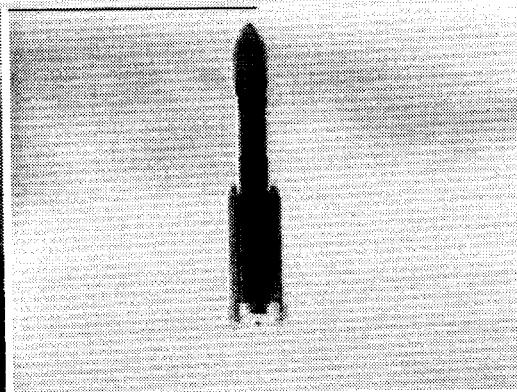


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Launch

- ♦ successfully launched
 - ◆ at 10:53 a.m. (JST) / 01:53 a.m. (UT)
on August 17, 1996
 - ◆ from Tanegashima Space Center



Orbit

Apogee Altitude	804.6 km
Perigee Altitude	789.0 km
Orbit Inclination	98.625 degrees
Period	100.8 minutes
Local Time at Descending Node	10:41 a.m.
Recurrent Cycle	41 days

Satellite

- ◆ Solar paddle: successfully deployed
- ◆ Fuel: more than 10 years
 - orbit control: once a month
- ◆ Battery: OK

Bus Instruments

- ◆ Data recorders
 - HKDR, LMDR, MDR-1, MDR-2: OK
- ◆ AOCS: OK
- ◆ C&DH, DT: OK

Sensor Status

- ♦ AVNIR: nominal operation
Mu, PA, pointing
- ♦ OCTS: nominal operation (VNIR)
tilt operation
earth shield deployed (TIR)
- DTL: nominal operation

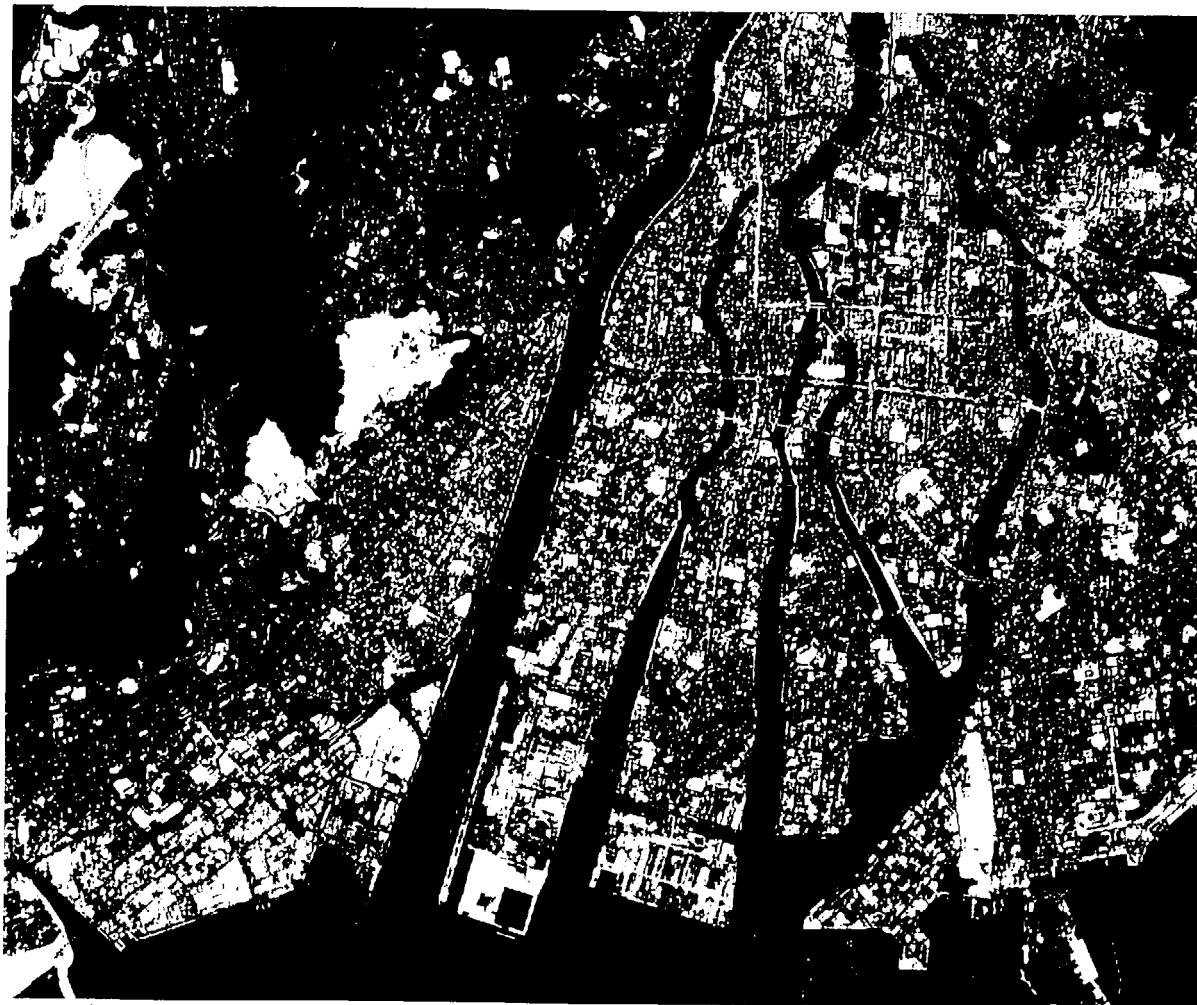
Sensor Status

- ◆ NSCAT: nominal operation
- ◆ TOMS: nominal operation
- ◆ POLDER: nominal operation
- ◆ ILAS: nominal operation
- ◆ IMG: launch lock release
- ◆ RIS: not yet deployed



ADEOS
Level 1 B2

AVNIR Pa Sep 5/1996 D +1320:+340 +
UTM CC 8m



ID: 19960905-022926

POINT: +18.76° INCID: 21.3° L
OP: D GAIN: N

SUN EL61° AZ159°
HEOC

COMP: 7
ALT: 797km



+ NASDA RETAINS OWNERSHIP of DATA processed on Sep 5/1996 exposed on Sep 5/1996 +